

REMARKS

Upon entry of the present Reply, claims 1-37 will be pending, of which claims 1, 3, 5, 6, 9, 10, 12, 16-19, 22, 26-28, 32-34 and 36-37 will have been amended to further clarify Applicants' invention. In this regard, independent claims 1, 36 and 37 will have been amended to further define the turbulent flow generation mechanism as comprising a part that is vibratable. Moreover, dependent claim 32 will have been rewritten into independent form, including all of the particulars of its base claim, i.e., independent claim 1, from which it depends. Applicants believe that all of the claims are allowable over the cited art and, therefore, since all other aspects of the present application are fully compliant with U.S. Patent and Trademark Office requirements, Applicants respectfully request timely allowance of the present application to issue into a U.S. letters patent. Applicants submit that no new matter is introduced by the amendments made herein.

Applicants note that claims 32-35 are not rejected in the body of the above-noted Official Action, nor are the claims mentioned anywhere in the body of the Action. Accordingly, even though claims 1-37 are indicated to be rejected on the Form PTOL-326 that accompanied the Official Action, the absence of a formal grounds for rejection of claims 32-35 is understood by Applicants as an indication of the allowability of claims 32-35 over the cited art. In an effort to expedite the prosecution of the present application, Applicants have rewritten claim 32 into independent form, including all of the particulars of its base claim, i.e., independent claim 1, from which it depends. Should the Examiner disagree and reject claims 32-35, the Examiner is requested to make such a rejection non-final as no ground for rejection was previously set forth against the claims.

Applicants note with appreciation the Examiner's consideration of the documents cited in the Information Disclosure Statement filed on May 3, 2006 in the present application. Applicants thank the Examiner for returning, with the afore-noted Official Action, an initialed and signed copy of the Form PTO-1449 that accompanied the May 3, 2006 Information Disclosure Statement.

Applicants also note with appreciation the Examiner's acknowledgement of Applicants' claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f), as well as confirmation of receipt of the certified copies of the priority documents.

Applicants also note with appreciation the Examiner's acceptance of the drawings filed February 2, 2006.

In the above-noted Official Action dated April 2, 2007, four separate grounds of rejection are provided. In particular, claims 1-9, 13 and 16 are rejected under 35 U.S.C. §102(b) as being clearly anticipated by LEHRKE (U.S. Patent No. 4,501,952). Claims 10-12, 14 and 15 are rejected under 35 U.S.C. §103(a) as being unpatentable over LEHRKE alone. Claims 17-31 and 36 are rejected under 35 U.S.C. §103(a) as being unpatentable over LEHRKE in view of MITSUYUKI et al. (Japanese Patent Application Publication No. 2002-322713). Claim 37 is rejected under 35 U.S.C. §103(a) as being unpatentable over LEHRKE in view of KIYOKO et al. (Japanese Patent Application Publication No. 2003-106669). Applicants note that claims 32-35 are not rejected. Applicants respectfully traverse each of these rejections and request reconsideration and withdrawal of the same in the next Official communication for at least the following reasons.

Regarding the rejection of claims 1-9, 13 and 16 under 35 U.S.C. §102(b) based on LEHRKE, upon entry of the present Amendment, independent claim 1 will have been amended to clarify that the turbulent flow generation mechanism comprises a part that is vibratable to generate a turbulent flow. Applicants submit that LEHRKE does not disclose, *inter alia*, a turbulent flow generation mechanism comprising a part that is vibratable to generate a turbulent flow as recited in, e.g., independent claim 1.

LEHRKE discloses an electric fluid heater temperature control system that provides precise control under varying conditions. Referring to Figure 1, LEHRKE discloses a housing 10, a fluid mixer 12, a heating element 14, a threaded inlet port 17, which is adapted for coupling to a fluid hose, and a threaded port 19. In the rejection of independent claim 1, it appears that a fluid mixer 12 of LEHRKE is equated to the turbulent flow generation mechanism of claim 1. However, as shown in Figure 3A, LEHRKE discloses affixing a baffle 32 to a fluid mixer 12, thereby rendering the fluid mixer 12 incapable of vibrating, much less vibrating so as to generate a turbulent flow in the flow path of the housing 10. Moreover, the fluid mixer 12 does not comprise any part that is capable of vibrating to generate a turbulent flow in the flow path of the housing 10. Hence, LEHRKE does not disclose, *inter alia*, a turbulent flow generation mechanism comprising a part that is vibratable to generate a turbulent flow as claimed in independent claim 1.

Thus, because LEHRKE does not disclose each and every element of the independent claim, i.e., claim 1, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. §102(b) based on LEHRKE. Further, claims 2-9, 13 and 16 depend from claim 1 and are patentably distinguishable for at least the reasons provided

above with respect to claim 1, as well as for additional reasons related to their own recitations.

Regarding the rejection of claims 10-12, 14 and 15 under 35 U.S.C. §103(a) based on LEHRKE, as noted above, upon entry of the present Amendment, independent claim 1 will have been amended to clarify that the turbulent flow generation mechanism comprises a part that is vibratable to generate a turbulent flow. The Examiner acknowledges that the features of these claims are not disclosed by LEHRKE, but asserts that they are obvious. Applicants respectfully traverses this assertion. As discussed above, Applicants submit that LEHRKE does not disclose, teach or even suggest, a turbulent flow generation mechanism comprising a part that is vibratable to generate a turbulent flow as recited, e.g., in independent claim 1. As claims 10-12, 14 and 15 depend from claim 1, these claims are patentably distinguishable for at least the reasons provided above with respect to claim 1, as well as for additional reasons related to their own recitations.

As noted earlier, LEHRKE discloses affixing a baffle 32 to a fluid mixer 12, thereby rendering the fluid mixer 12 incapable of vibrating, much less vibrating so as to generate a turbulent flow in the flow path of the housing 10. Hence, not only does LEHRKE not disclose, *inter alia*, a turbulent flow generation mechanism comprising a part that is vibratable to generate a turbulent flow as claimed in, e.g., independent claim 1, but LEHRKE teaches away from allowing the fluid mixer 12 to vibrate, as evidenced by the permanently affixed baffle 32 (*see* Fig. 3A of LEHRKE).

Accordingly, because LEHRKE, whether taken alone or in any proper combination, does not teach or suggest every element of the independent claim, i.e., claim 1, but

instead teaches away from the invention of claim 1, withdrawal of the rejection of dependent claims 10-12, 14 and 15 under 35 U.S.C. §103(a) based on LEHRKE is respectfully requested. Claims 10-12, 14 and 15 depend from claim 1 and are patentably distinguishable for at least the reasons provided above with respect to claim 1, as well as for additional reasons related to their own recitations.

Furthermore, Applicants respectfully traverse each of the conclusions stated at page 3 of the Official Action with respect to claims 10-12, 14 and 15. However, because each of claims 10-12, 14 and 15 depends from claim 1, and is patentably distinguishable for at least the reasons provided above with respect to claim 1, Applicants believe it is unnecessary to discuss the further distinctions presented by the additional recitations of claims 10-12, 14 and 15.

Regarding the rejection of claims 17-31 and 36 under 35 U.S.C. §103(a) based on LEHRKE and MITSUYUKI et al., upon entry of the present Amendment, independent claims 1 and 36 will have been amended to clarify that the turbulent flow generation mechanism comprises a part that is vibratable to generate a turbulent flow. Applicants submit that MITUSYUKI et al. fail to disclose that which is lacking in LEHRKE; namely, a turbulent flow generation mechanism comprising a part that is vibratable. Thus, Applicants submit that LEHRKE and/or MITSUYUKI et al., whether taken alone or in any proper combination, do not disclose, teach or suggest, *inter alia*, a turbulent flow generation mechanism comprising a part that is vibratable to generate a turbulent flow as recited in, e.g., independent claims 1 or 36. Further, since claims 17-31 depend from claim 1, these claims are patentably distinguishable for at least the reasons provided with respect to claim 1, as well as for additional reasons related to their own recitations.

As discussed earlier with regard to independent claim 1, LEHRKE, does not teach or suggest, a turbulent flow generation mechanism comprising a part that is vibratable to generate a turbulent flow. Similarly, MITSUYUKI et al. do not teach or suggest a turbulent flow generation mechanism comprising a part that is vibratable to generate a turbulent flow. Since the rejection of claims 17-31 and 36 relies on MITSUYUKI et al. only to teach a plate 8 as conventional and leading to accurate temperature sensing, Applicants submit that MITSUYUKI et al., therefore, do not cure the noted-above deficiencies of LEHRKE. Accordingly, the rejection of claims 17-31 and 36 under 35 U.S.C. §103(a) based on LEHRKE and MITSUYUKI et al. should be reconsidered and withdrawn.

Regarding the rejection of claim 37 under 35 U.S.C. §103(a) based on LEHRKE and KIYOKO et al., upon entry of the present Amendment, claim 37 will have been amended to clarify that the turbulent flow generation mechanism comprises a part that is vibratable to generate a turbulent flow. Applicants submit that LEHRKE and/or KIYOKO et al., whether taken alone or in any proper combination, do not disclose, teach or suggest, *inter alia*, a turbulent flow generation mechanism comprising a part that is vibratable to generate a turbulent flow as recited in claim 37.

As discussed earlier, LEHRKE, does not teach or suggest, a turbulent flow generation mechanism comprising a part that is vibratable to generate a turbulent flow. Similarly, KIYOKO et al. do not teach or suggest a turbulent flow generation mechanism comprising a part that is vibratable to generate a turbulent flow. Since the rejection of claim 37 relies on KIYOKO et al. only to teach using flow-through heaters to heat wash water, Applicants submit that KIYOKO et al., therefore, do not cure the noted-above

deficiencies of LEHRKE. Accordingly, the rejection of claim 37 under 35 U.S.C. §103(a) based on LEHRKE and KIYOKO et al. should be reconsidered and withdrawn.

In view of the amendments and remarks contained herein, Applicants respectfully request reconsideration and withdrawal of each of all rejections together with allowance of all of the claims pending in the present application. Such action is respectfully requested and is believed to be appropriate.

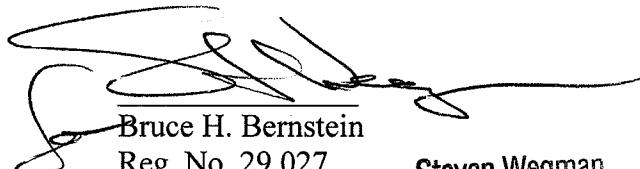
SUMMARY AND CONCLUSION

In view of the foregoing, it is submitted that the Examiner's rejections under 35 U.S.C. §§ 102(b) and 103(a) in the Official Action dated April 2, 2007, have been overcome and should be withdrawn. The present Amendment is in proper form, and none of the cited art teaches or suggests Applicants' claimed invention. Accordingly, Applicants request timely allowance of the present application.

Should the Commissioner determine that an extension of time is required in order to render this response timely and/or complete, a formal request for an extension of time, under 37 C.F.R. §1.136(a), is herewith made in an amount equal to the time period required to render this response timely and/or complete. The Commissioner is authorized to charge any required extension of time fee under 37 C.F.R. §1.17 to Deposit Account No. 19-0089.

Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully Submitted,
Nakamura KAZUSHIGE et al.



Bruce H. Bernstein
Reg. No. 29,027

Steven Wegman
Reg. No. 31,438

June 28, 2007
GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191